68.16(3) The common change occurring in milk is the development of acidity, causing an acid flavor and odor, or even complete or partial coagulation. Other undesirable changes include sweet curdling, ropiness, gassiness and abnormal flavors, odors and colors. All milk showing any of these defects or any other defect must be rejected.

68.16(4) The presence of any insect in milk shall be sufficient cause for rejection. This rule is intended to implement Iowa Code sections 194.2, 194.12 and 194.15.

21—68.17(194) New producers.

- **68.17(1)** A "new producer" is a person selling milk for the first time who has not previously produced milk under Iowa Code chapter 194. A person who formerly produced farm-separated cream and is now selling, for the first time, whole milk for manufacturing purposes is considered a new producer. Similarly, a producer who previously supplied Grade A milk or sold milk in another state not reciprocating on quality transfers and offering manufacturing milk for sale in the state of Iowa for the first time shall be classified as a new producer. A new producer is also one who has not offered manufacturing milk for sale since the enactment of this milk grading law on July 4, 1959.
- **68.17(2)** A licensed milk grader must examine, smell and taste the first lot of milk purchased from a new producer. This milk must also be tested immediately for extraneous matter or sediment content. However, it is not necessary to subject the milk of the new producer on the first delivery to a bacterial quality test. A test of this nature, however, must be made on a properly collected sample from this producer within 15 days thereafter.
- **68.17(3)** If the sediment disc on the can of milk selected for test shows sediment in excess of 2.50 mg., all cans in the shipment shall be tested for sediment content in the same manner. Any milk showing sediment in excess of 2.50 mg. shall be rejected by the creamery, cheese factory or milk processing plant and not used for human consumption.

This rule is intended to implement Iowa Code section 194.2.

21—68.18(194) Testing and exclusion of Class III milk.

- **68.18(1)** If a producer desires to change to another plant or factory, it is required that the first shipment of milk be accompanied by a written quality release form from the former purchaser. This quality release form must be requested by the producer in person or in writing from the manager of the plant previously purchasing the milk. (Plant being asked for quality release shall give it to person with written order or deliver to producer making the request.) The new buyer shall not accept the first delivery until receiving a copy of the record of the producer's milk quality covering the preceding 90 days.
- **68.18(2)** If the quality release form of this producer shows that the last test for bacterial quality indicated Class III milk, the new purchaser must then test first shipment of the transferring producer's milk by:
 - a. Organoleptic grading (physical appearance, taste and smell).
 - b. Sediment or extraneous matter.
- c. An estimate of bacterial quality must be run within seven days from the last test date entered on the transfer form.
- **68.18(3)** In other words, the previous record of bacterial quality is transferred. For example, if a producer has had two consecutive Class III bacterial estimates at one plant and then decides to sell the milk to another plant, the producer may not start as a new producer without previous history. This rule requires that the milk be tested for four consecutive weeks if there is no improvement in the quality of the milk during this period. Upon transferring to a new plant, the next bacterial test is entered on the record as the third of the four required tests.

68.18(4) If the fourth consecutive test is still Class III, this producer's milk may not be purchased by any plant for human consumption. The plant refusing this milk is required to notify the area resident inspector of the dairy products control bureau of the Iowa department of agriculture and land stewardship, immediately, in writing.

This rule is intended to implement Iowa Code section 194.2.

21—68.19(194) Unlawful milk. Four weekly Class III bacterial tests or milk containing radioactive agents "deleterious to health" shall make rejection compulsory and that milk shall not be accepted thereafter by any plant or creamery until authorized by the secretary of agriculture.

This rule is intended to implement Iowa Code sections 194.4 and 194.9.

21—68.20(194) Price differential. All purchasers or receivers of milk shall maintain a price differential between the grades of milk as defined by bacterial estimate test.

21—68.21(194) Penalties for plants and producers.

68.21(1) The scope of this section is broad, covering all plant employees, operators and milk haulers.

68.21(2) A producer selling milk to a new purchaser without first obtaining a quality release form from the former buyer, would be an example of noncompliance with the law and these rules.

This rule is intended to implement Iowa Code section 194.20.

21—68.22(192,194) Farm requirements for milk for manufacturing.

68.22(1) *Milking facility and housing*. A milking barn or milking parlor of adequate size and arrangement shall be provided to permit normal sanitary milking operations. It shall be well lighted and ventilated, and the floors and gutters in the milking area shall be constructed of concrete or other impervious material. The facility shall be kept clean.

68.22(2) *Milk house or milk room.* A milk house or milk room conveniently located and properly constructed, lighted, and ventilated shall be provided for handling and cooling milk and for washing, handling, and storing the utensils and equipment. Other products shall not be stored in the milk room which would be likely to contaminate milk, or otherwise create a public health hazard.

It shall be equipped with wash and rinse vat, utensil rack, milk cooling facilities and have an adequate supply of hot water available for cleaning milking equipment.

68.22(3) *Utensils and equipment.* Utensils, milk cans, milking machines (including pipeline systems), and other equipment used in the handling of milk shall be maintained in good condition, shall be free from rust, open seams, milkstone, or any unsanitary condition, and shall be washed, rinsed, and drained after each milking, stored in suitable facilities, and sanitized immediately before use with at least 50 p.p.m. chlorine solution or its equivalent.

68.22(4) Cooling. Milk in farm bulk tanks shall be cooled to 45° F or 7° C or lower within two hours after milking and maintained at 50° F or 10° C or lower until transferred to the transport tank. Milk in cans shall be cooled immediately after milking to 50° F or 10° C or lower unless delivered to the plant within two hours after milking. The temperature requirement for milk placed in cans will be 50° F or 10° C or lower. The cooler, tank, or refrigerated unit shall be kept clean.

This rule is intended to implement Iowa Code chapter 192 and section 192A.28.

21—68.23 to 68.25 Reserved.

21—68.26(190,192,194) Tests for abnormal milk.

- **68.26(1)** At least once every 30 days, all creameries, cheese factories, or milk processing plants, hereafter referred to as purchasers, shall test a herd milk sample from every producer in a certified or officially designated laboratory to determine the existence of abnormal milk.
- **68.26(2)** A herd milk sample shall be deemed to be abnormal or adulterated if a test by direct microscopic examination, electronic somatic cell count, or equivalent technique, reveals a count greater than 750,000 somatic cells/ml.
- **68.26(3)** Whenever two of the last four consecutive somatic cell counts exceed 750,000 cells/ml, the purchaser or regulatory authority shall send a written notice thereof to the person concerned. An additional sample shall be taken within 21 days of the sending of such notice, but not before the lapse of three days. Immediate suspension of permit shall be instituted whenever the standard is violated by three of the last five somatic cell counts.
- **68.26(4)** Within one week following receipt of a written application from the producer, an inspection shall be made by the regulatory authority or the purchaser and a herd milk sample taken. If the test indicates a count of 750,000 or less somatic cells/ml, the producer's milk may be purchased for human consumption provided additional samples of herd milk are tested at a rate of not more than two per week. The producer shall be reinstated under the normal testing program when three out of four consecutive tests have counts of 750,000 or less somatic cells/ml.

This rule is intended to implement Iowa Code chapter 192 and Iowa Code sections 190.4, 194.4, and 194.6.

21—68.27(192,194) Standards for performing farm inspections. The August 1, 1976, manual prepared by U.S.D.A./AMS, Dairy Division, titled "General Instructions for Performing Farm Inspections According to U.S.D.A. Recommended Requirements for Manufacturing Purposes and Its Production and Processing for Adoption by State Regulatory Agencies," is adopted in its entirety, and shall constitute the official standards for farm producing milk for manufacturing, with the following exception:

Strike from Rule 1c, Brucellosis Test, the words "Uniform Methods and Rules" for establishing and maintaining Certified Brucellosis Free Herds of Cattle, Modified Certified Brucellosis Area and Certified Brucellosis Free Areas which are approved by Animal Disease Eradication Division, Agricultural Research Service. . .", and insert in lieu thereof, "Brucellosis Eradication, Uniform Methods and Rules, effective April 1, 1981". The bacteriological standards for private water supplies used by dairy farms consists of an MPN (Most Probable Number of Coliform Organisms) of less than 2.2/100 ml by the multiple tube fermentation technique, or less than 1/100 ml by the membrane filter technique.

DAIRY FARM WATER

21-68.28 to 68.34 Reserved.

21—68.35(192) Dairy farm water supply.

- **68.35(1)** Water for milk house and milking operations shall be from a supply properly located, protected, and operated and shall be easily accessible, adequate and of a safe, sanitary quality.
- **68.35(2)** A Grade A permit shall not be issued to an applicant when the water well supplying the dairy facility is located in a well pit.
- **68.35(3)** New well construction or the reconstruction of an existing well supplying the dairy facility shall be constructed according to 567—Chapter 49, Iowa Administrative Code.

- **68.35(4)** Frost-free hydrants shall be located at least ten feet from the well that supplies the water for the dairy facility unless a written variance is granted by the department.
- **68.35(5)** The department encourages the use of high-pressure washers for use in the dairy facility. However, they can create a negative pressure and contaminate the water supply system because of their capability to pump at a faster rate than water can be supplied if not properly installed and operated.

The dairy facility water supply system shall be protected from overpumping by a high-pressure washer by one of the following:

- 1. A separate water supply.
- 2. By supplying the high-pressure washer from a surge tank that is isolated from the main water supply system by an air gap.
 - 3. A low-pressure cutoff switch.
- 4. A device built into the high-pressure washer by the manufacturer and approved by the department.
- 5. Any other device installed in the system to prevent a negative pressure to the supply system that is approved by the department.

This rule is intended to implement Iowa Code chapter 192.

21—68.36(192) Antibiotic testing.

- **68.36(1)** The dairy industry shall screen all Grade A and Grade B farm bulk milk pickup tankers and farm can milk loads for beta lactam drug residues or other residues designated. A sampling method shall be used with can milk loads to ensure that the sample includes raw milk from every can on the vehicle.
- **68.36(2)** When loads are found to contain drugs or other inhibitors at levels exceeding Food and Drug Administration established "safety levels," the dairy products control bureau shall be notified immediately of the results and of the ultimate disposition of the raw milk. Disposition shall be in a manner approved by the bureau. The producer samples from the violative load shall be tested for trace back to the farm. The primary responsibility for traceback shall be that of the initial purchaser of the raw milk.
- **68.36(3)** Further pickups of the violative individual producer(s) shall be immediately discontinued and the permit shall be suspended until such time that subsequent testing by a certified industry supervisor establishes that the milk does not exceed safe levels of inhibitory residues.
- **68.36(4)** The dairy products control bureau staff, including the contract inspectors, shall monitor the dairy industry inhibitor load testing activities by making unannounced, on-site inspections to collect load samples and to review the load sampling records.
- **68.36(5)** For the first violative occurrence within a 12-month period, the producer's permit shall be suspended for two days or an equivalent penalty. If the milk purchaser has in place a penalty equal to or exceeding a two-day suspension, the two-day suspension shall be waived. As used in this subrule, an "equivalent penalty" means a monetary penalty that must be paid by the producer, equaling at least two days of production for the producer.
- **68.36(6)** For the second violative occurrence within a 12-month period, the producer's permit shall be suspended for four days or an equivalent penalty. If the milk purchaser has in place a penalty equal to or exceeding a four-day suspension, the four-day suspension shall be waived. As used in this subrule, an "equivalent penalty" means a monetary penalty that must be paid by the producer, equaling at least four days of production for the producer.

- **68.36(7)** For the third violative occurrence within a 12-month period, the permit shall be suspended for four days and, in addition, the department shall initiate administrative procedures to revoke the producer's permit. Upon revocation the producer may reapply for a permit effective at least four days after the effective date of the revocation. However, a Grade A permit holder shall be ineligible for a Grade A permit until the applicant has been selling on the Grade B Class 1 market for at least 60 days. A Grade B permit holder shall be ineligible for a Grade A or Grade B permit until the applicant has been selling on the undergrade Class 3 market for at least 60 days. For purposes of this rule, a producer on the undergrade market shall be paid no more than 90 percent of the Grade B rate.
 - **68.36(8)** Rescinded IAB 11/3/99, effective 12/8/99.
- **68.36(9)** When the tests show a load is nonviolative, but routine regulatory sampling shows that a producer on the load is violative, the permit shall be suspended until subsequent testing establishes that the milk does not exceed safe levels of inhibitory residues. The first or second monetary penalty within a 12-month period shall be waived. In case of a third violation within a 12-month period, the permit shall be suspended and revocation procedures shall be initiated as provided in subrule 68.36(7).
- **68.36(10)** Each violative occurrence within a 12-month period, including a violative producer found on a nonviolative load, shall count as a first, second, third or fourth violation against the producer. The permit shall be reinstated to a temporary status after subsequent testing shows no inhibitor residues. With each violation, the Milk and Dairy Beef Residue Prevention Protocol program shall be administered by the veterinarian to the producer, with the program certificate being signed by both. Failure to obtain the program certificate within 30 days and failure to mail or fax a copy to the dairy products control bureau office within 35 days from the date of the producer notice will result in the permit suspension of both the Grade A and Grade B producer to the Class 3 manufacturing undergrade status with the respective lowered milk price.
- **68.36(11)** Records shall be kept by the industry at each receiving or transfer station of all incoming farm pickup loads of raw milk. The records shall be retained for a period of at least 12 months.
 - a. The records shall include the following information:
 - (1) Name of the organization;
 - (2) Name of test(s) used;
 - (3) Controls, positive and negative;
 - (4) Date of test(s);
 - (5) Time the test was performed;
 - (6) Temperature;
 - (7) Identification of the load;
 - (8) Pounds of milk on the load;
 - (9) Initials of the person filling out the record.
 - b. When the load is violative, the records shall also include the following:
 - (1) Names of the producers on the load;
 - (2) Identification of the violative producer(s);
 - (3) The first name of the dairy products control bureau office person telephoned;
 - (4) Location of disposition of the violative load;
 - (5) The number of pounds of milk belonging to each producer.

68.36(12) When telephoning the dairy products control bureau office to report a violative load or violative producer, the following information shall be given:

- a. Name of the person telephoning;
- b. Name of the organization;
- c. Date of violation;
- d. Route number and name of the milk hauler;
- e. Verification that all producers on the violative load were tested;
- f. Name and producer number(s) of the violative producer(s) and milk grade;
- g. The concentration of residue in the producer sample;
- h. The concentration of residue in the load sample, if available;
- *i.* Name of test(s) used;
- j. Name of analyst;
- k. Pounds of milk on the load and violative producer(s) pounds;
- l. Location of disposition of the milk.

This rule is intended to implement Iowa Code chapter 192.

21—68.37 to 68.39 Reserved.

MILK TANKER, MILK HAULER, MILK GRADER, CAN MILK TRUCK BODY

21-68.40(192) Definitions.

"Bulk milk tanker" means a mobile bulk container used to transport milk or fluid milk products from farm to plant or from plant to plant. This includes both the over-the-road semitankers and the tankers that are permanently mounted on a motor vehicle.

"Bulk tank" means a bulk tank used to cool and store milk on a farm.

"Can milk truck body" means a truck body permanently mounted on a motor vehicle for the purpose of picking up milk in milk cans from dairy farms for delivery to a milk plant.

"Dairy farm" means any place where one or more cows, sheep or goats are kept for the production of milk.

"Milk" means the lacteal secretion of cows, sheep or goats, and includes dairy products.

"Milk can" means a sanitary-designed, seamless, stainless steel can, manufactured from approved material for the purpose of storing raw milk on can milk farms, to be picked up and loaded onto a can milk truck body.

"Milk grader" means a person who collects a milk sample from a bulk tank or a bulk milk tanker. This includes dairy industry field personnel and dairy industry milk intake personnel.

"Milk hauler" means any person who collects milk at a dairy farm for delivery to a milk plant.

"Milk plant" means any facility where milk is processed, received or transferred.

"Milk producer" means any person who owns or operates a dairy farm.

21—68.41(192) Bulk milk tanker license required.

68.41(1) A milk tanker shall not operate in Iowa without a valid license.

68.41(2) The license application shall include a description of the bulk milk tanker, including the make, serial number, capacity and the address at which the bulk milk tanker is customarily kept when not being used. The applicant shall also furnish any other information which the department reasonably requires for identification and licensing.

- **68.41(3)** A license pursuant to this rule expires June 30 annually and is not transferable between tankers.
- **68.41(4)** The department may initiate an enforcement action against a person operating a bulk milk tanker if the department determines that the person has operated without a license or has procured another person to operate without a license.
 - **68.41(5)** The cost of the bulk milk tanker license is \$25 per year.
- **68.41(6)** If the bulk milk tanker and accessories have been inspected within the last 12 months and carry a current license, the bulk milk tanker renewal license application and a return envelope will be mailed to the owner of the tanker in April annually by the dairy products control bureau office in Des Moines.
- 21—68.42(192) Bulk milk tanker construction. A bulk milk tanker, including equipment and accessories, shall be of a sanitary design and construction and shall comply with "3-A Sanitary Standards for Stainless Steel Automotive Milk and Milk Products Transportation Tanks for Bulk Delivery and/or Farm Pick-Up Service," Number 05-14 (November 1, 1989), published jointly by the International Association of Milk, Food and Environmental Sanitarians, Inc. and the Food and Drug Administration, Public Health Service, United States Department of Health and Human Services.

21—68.43(192) Bulk milk tanker cleaning and maintenance.

- **68.43(1)** A bulk milk tanker, including equipment and accessories, shall be thoroughly cleaned immediately after each day's use and shall be kept clean and in good repair.
- **68.43(2)** All product contact surfaces on a bulk milk tanker, including all contact product surfaces of equipment and accessories used on the tanker, shall be thoroughly cleaned.
 - **68.43(3)** External surfaces of a bulk milk tanker shall also be thoroughly cleaned.
- 21—68.44(192) Bulk tanker sanitization. All product contact surfaces on a bulk milk tanker, including equipment and accessories, shall be thoroughly sanitized immediately after cleaning.

21—68.45(192) Bulk milk tanker cleaning facility.

- **68.45(1)** A bulk milk tanker shall be cleaned and sanitized in a fully enclosed facility.
- **68.45(2)** The facility shall have an impervious drained floor and shall be equipped with adequate hot and cold water under pressure, a wash vat, sanitizing facilities and equipment storage racks.
- **68.45(3)** A bulk milk tanker may be cleaned and sanitized in the same room where milk is being received from bulk milk tankers.

21—68.46(192) Bulk milk tanker cleaning tag.

- **68.46(1)** When a bulk milk tanker has been thoroughly cleaned and sanitized, but is not returning to the same plant, the dairy receiving operator shall attach a tag showing all of the following:
 - a. The date on which the tanker was cleaned and sanitized.
 - b. The name and location of the facility where the tanker was cleaned and sanitized.
 - c. The legible signature or initials of the person who cleaned and sanitized the tanker.
 - d. The type or name of the chemicals used to clean and sanitize.
 - **68.46(2)** The tag shall be attached to the outlet valve or inside the pump cabinet of the tanker.
 - **68.46(3)** The tag shall not be removed until the tanker is cleaned and sanitized again.
- **68.46(4)** All unused tags shall be maintained in a secure location so they cannot be easily used for unauthorized purposes.

21—68.47(192) Dairy plant, receiving station or transfer station records.

- **68.47(1)** Records shall be kept at all plants where tankers are cleaned and sanitized.
- **68.47(2)** The records shall be kept for at least 90 days.
- **68.47(3)** The records shall include all of the following:
- a. The name and address of the facility where the tanker was cleaned and sanitized.
- b. The date on which the tanker was cleaned and sanitized.
- c. The legible name or initials of the person who cleaned and sanitized the tanker.

21—68.48(192) Milk hauler license required.

- **68.48(1)** A person shall not engage in the activities of being a milk hauler without a valid milk hauler license.
 - **68.48(2)** The cost of a milk hauler license is \$10.
- **68.48(3)** A milk hauler license obtained pursuant to this rule expires June 30 annually and is not transferable between persons.
- **68.48(4)** As a condition of relicensing, a milk hauler license renewal applicant shall have had an on-the-farm evaluation of milk pickup procedures by a department inspector within two years immediately prior to relicensure and shall have attended a milk hauler school within three years immediately prior if a hauler school was made available within that three-year period.
- **68.48(5)** If a milk hauler with a current license has had an on-the-farm evaluation within the last two years and has attended a state milk hauler training school within the last three years, a milk hauler renewal application and a return envelope will be mailed to the milk hauler in April annually by the dairy products control bureau office in Des Moines.
- **68.48(6)** The department may take action against a person if the department determines that the person has engaged in activities requiring a milk hauler license without a valid milk hauler license or has procured another person to operate without a license.

21—68.49(192) New milk hauler license applicant.

- **68.49(1)** The department may issue a 45-day interim license to a new applicant for a milk hauler license if the department determines that the new applicant has been trained by an industry field person who holds a milk hauler license.
- **68.49(2)** An application for an interim license may be made by calling the dairy products control bureau office in Des Moines at (515)281-3545 and requesting the interim license and the Milk Hauler's Manual. The applicant shall give the name of the person who has provided the training and the telephone number where that person can be reached for verification. The license may be issued after verification of the training and verification of the trainer's license.
- **68.49(3)** The cost of the interim license is \$10 and will be used for the payment of the regular milk hauler license upon approval by the department.
- **68.49(4)** An application form for the regular milk hauler license will be sent with the interim license. During the 45-day interim period, in order to receive a regular milk hauler license, the applicant shall do both of the following:
- a. Pass a written examination based upon the Milk Hauler's Manual, given by a department inspector.
- b. Pass a written, on-the-farm evaluation of milk pickup procedures by a department inspector on a "Bulk Milk Pickup Tanker, Hauler Report and Sampler Evaluation Form" that was filled out by the department inspector at the time of the evaluation. This form shall be sent to the Des Moines office with the completed application and the \$10 license fee (if the fee has not been paid).

68.49(5) The department shall grant or deny a license application within the 45-day interim period. **68.49(6)** The department shall not issue a milk hauler license if court action is in progress against the applicant for operating without an interim or regular license.

21—68.50(192) Supplies required for milk collection and sampling. A milk hauler who collects milk in bulk from a dairy farm shall have all of the following supplies available:

- An adequate supply of sample containers.
- 2. A sample dipper.
- 3. A sample dipper storage container.
- 4. A sanitizing solution in the sample dipper storage container of 100 ppm of chlorine or equivalent.
 - 5. An insulated carrying case with a rack to hold samples.
- 6. A certified thermometer, accurate to plus or minus 2°F, that can be used to check the temperature of the milk in the farm bulk tank, the accuracy of the farm bulk tank thermometers and the temperature of the commingled load.
 - 7. A marking device to identify samples collected.
 - 8. A watch or timing device.
 - 9. An adequate supply of forms needed for milk collection and records.
 - 10. A writing device to write on the forms and records.
 - 11. Access to an adequate supply of single-service paper towels.

21—68.51(192) Milk hauler sanitization.

- 1. A milk hauler shall wear clean clothing.
- 2. A milk hauler shall maintain a high degree of personal cleanliness.
- 3. A milk hauler shall observe good hygienic practices.
- 4. A milk hauler shall not measure, sample or collect milk if the hauler has a discharging or infected wound or lesion on the hauler's hands or exposed arms.

21—68.52(192) Examining milk by sight and smell.

- **68.52(1)** Before a milk hauler receives or collects milk from a dairy farm, the hauler shall examine the milk by sight and smell and shall reject all milk that has any of the following characteristics:
 - 1. Objectionable odor.
 - 2. Abnormal appearance and consistency.
 - 3. Visible adulteration.
- **68.52(2)** A milk hauler who rejects milk from a farm shall collect only a sample of the rejected milk.
- **68.52(3)** If a dairy farmer disputes a milk hauler's rejection of the milk, the milk hauler shall contact the operator of the dairy plant to which the milk would ordinarily be delivered, and the plant operator or the plant field person shall examine the rejected milk to determine whether the milk was properly rejected.

21—68.53(192) Milk hauler hand washing. A milk hauler shall wash and dry hands before performing any of the following:

- 1. Using a thermometer.
- 2. Measuring the milk.
- 3. Collecting a milk sample.

21—68.54(192) Milk temperature.

- **68.54(1)** Before a milk hauler collects milk at a dairy farm, the milk hauler shall record the temperature of the milk to be collected.
- **68.54(2)** If the milk is collected more than two hours after the last milking, the milk hauler shall reject the milk if the milk temperature exceeds 45° F or 7° C.
- **68.54(3)** If milk from two or more milkings is collected within two hours of the last milking, the milk hauler shall reject the milk if the milk temperature exceeds 50°F or 10°C.
- **68.54(4)** If the farm bulk tank thermometer is working, at least once each month, and more often if necessary, a milk hauler shall check the accuracy of each dairy farm bulk tank thermometer by taking the temperature of the milk in the bulk tank with the milk hauler's thermometer and shall record the temperature on the milk pickup record card. This procedure shall be done at every pickup if the farm bulk tank thermometer is not working.
- **68.54(5)** Before a milk hauler uses the milk hauler's thermometer to take the temperature of the milk in a bulk tank, the hauler shall sanitize the stem of the thermometer in 100 ppm chlorine or its equivalent for a minimum of 30 seconds.
- **68.54(6)** A milk hauler shall immediately notify the milk producer and the dairy field person if the dairy farm bulk tank is not cooling properly or if the bulk tank thermometer is not recording the temperatures accurately.

21—68.55(192) Connecting the milk hose.

- **68.55(1)** Before the milk hauler connects a tanker hose to a bulk tank, the hauler shall examine the fittings of the tanker hose and the bulk tank outlet and shall clean and sanitize as necessary.
- **68.55(2)** The milk hauler shall attach the milk hose to the bulk tank outlet in a manner that does not contaminate the hose or the hose cap.
 - **68.55(3)** The hose shall be connected through the milk room hose port.

21—68.56(192) Measuring the milk in the bulk tank.

- **68.56(1)** Before milk is transferred from a bulk tank to a bulk milk tanker, the milk hauler shall measure the amount of milk in the bulk tank.
- **68.56(2)** The milk hauler shall measure the milk using a clean gauge rod or other measuring device that is specifically designed and calibrated to measure milk in the bulk tank.
- **68.56(3)** Immediately before using the gauge rod or measuring device, the milk hauler shall wipe it dry with a clean, single-service disposable towel.
- **68.56(4)** A milk hauler shall not measure the amount of milk in a dairy farm bulk tank until the milk in the tank is motionless.
- **68.56(5)** If the milk is being agitated, the milk hauler shall turn off the agitator and wait for the milk to become completely motionless before measuring the milk.
- **68.56(6)** After measuring the milk with a gauge rod or other device, the milk hauler shall use that measurement to calculate the weight or volume of milk in the bulk tank with the manufacturer's conversion chart.
 - 68.56(7) The milk hauler shall record that weight or volume on a written collection record.

21—68.57(192) Milk sample for testing.

- **68.57(1)** Before milk is transferred from a dairy farm bulk tank to a bulk milk tanker, a milk hauler shall collect a representative sample of that milk from the dairy farm bulk tank for testing. If there is more than one bulk tank, a sample from each tank shall be taken and identified.
- **68.57(2)** The collected sample shall be filled only $\frac{3}{4}$ full in the sample container so that the sample can be agitated in the lab.

21—68.58(192) Milk collection record.

68.58(1) Whenever a milk hauler collects a milk shipment from a dairy farm, the milk hauler shall make a written record for that shipment.

68.58(2) One copy of the collection record shall be posted in a dairy farm milk room.

68.58(3) The collection record shall be initialed by the milk hauler.

68.58(4) The record shall include all of the following:

- The milk producer identification number.
- 2. The milk hauler's initials.
- 3. The date when the milk was sampled and collected.
- 4. The temperature of the milk when collected.
- 5. The weight or volume of milk collected as determined by the milk hauler.

21—68.59(192) Loading the milk from the bulk tank to the milk tanker.

68.59(1) After a milk hauler has sampled milk from the dairy farm bulk tank and prepared a complete collection record, the hauler may transfer the milk from that bulk tank to the milk tanker.

68.59(2) A milk hauler shall not collect milk from any other container on a dairy farm other than from a bulk tank.

68.59(3) Partial pickup of milk shall be avoided whenever possible.

68.59(4) After a milk hauler has collected all of the milk from a bulk tank, the milk hauler shall disconnect the milk hose from the bulk tank, cap the hose and return the hose to its cabinet in the bulk milk tanker.

68.59(5) The milk hauler shall inspect the empty dairy farm bulk tank for abnormal sediments and shall report any abnormal sediments to the dairy producer and the dairy plant field person.

68.59(6) After the milk hauler has disconnected the milk hose and inspected the empty farm bulk tank for abnormal sediments, the milk hauler shall rinse the bulk tank with cold or lukewarm water unless the bulk tank is self-cleaning and includes a pre-rinse cycle as part of the self-cleaning process.

21—68.60(192) Milk samples required for testing.

68.60(1) The milk hauler shall collect a sample of milk from each dairy farm bulk tank before that milk is transferred to a bulk milk tanker.

68.60(2) A milk sample collected from a dairy farm bulk tank shall not be commingled with a sample collected from any other bulk tank.

21—68.61(192) Bulk milk sampling procedures. A milk hauler shall comply with all of the following procedures when collecting a milk sample:

- 1. Shall collect the sample after the bulk tank milk has been thoroughly agitated.
- 2. Shall agitate a bulk tank of less than a 1000 gallon size, in the presence of the milk hauler, for at least five minutes before the milk sample is taken.
- 3. Shall agitate a bulk tank of a 1000 gallon size or larger, in the presence of the milk hauler, for at least ten minutes before the milk sample is taken. If there are stamped printed instructions on the bulk tank, giving explicit agitation instructions that are different from ten minutes, the bulk tank shall then be agitated according to the written instructions.

- 4. Shall collect the sample using a sanitized sample dipper that is manufactured for the purpose of taking a milk sample from a bulk tank. The milk hauler shall not use the sample container to collect a milk sample.
- 5. Shall rinse the sanitized sample dipper in the milk, in the bulk tank, at least two times before the dipper is used to collect the sample.
- 6. After rinsing the sample dipper in the milk, shall pour the sample from the dipper into a sample container until the sample container is ¾ full and shall securely close the sample container.
- 7. Shall not fill the sample container over the bulk tank, but shall fill the sample container off to the side of the bulk tank, over the floor of the milk room.
 - 8. Shall handle the sample container and cap aseptically.
- 9. After collecting the milk sample, shall immediately place the sample on a rack or floater, on ice in the insulated sample container, and rinse the sample dipper with clean potable water.

21—68.62(192) Temperature control sample.

- **68.62(1)** The milk hauler shall collect two milk samples at the first farm on each milk route.
- **68.62(2)** One of the two samples collected from the first farm shall be used for a temperature control (TC) sample.
- **68.62(3)** The temperature control (TC) sample shall remain in the rack with the other samples pertaining to that load.
- **68.62(4)** The temperature control (TC) sample container shall be marked in a legible manner identifying the sample as the TC sample and shall also be marked with the other following information:
 - 1. The producer identification number.
 - 2. The initials of the milk hauler.
 - 3. The date the sample was collected.
 - 4. The time the sample was collected.
 - 5. The temperature of the milk in the farm bulk tank from which the TC sample was collected.
- 21—68.63(192) Producer sample identification. Immediately before a milk hauler collects a milk sample, but before the milk hauler opens the sample container, the milk hauler shall, unless that sample container is prelabeled with the producer information, clearly and indelibly label the sample container with all of the following information:
 - 1. The producer identification number.
 - 2. The date when the sample was collected.
 - 3. The temperature of the milk in the bulk tank.

21—68.64(192) Care and delivery of producer milk samples.

- **68.64(1)** Immediately after a milk hauler collects a milk sample, the milk hauler shall place the sample container in a clean, refrigerated carrying case in which the temperature is kept at from 32°F to 40°F.
- **68.64(2)** If the sample containers are packed in ice or cold water to keep the samples refrigerated, the ice or water shall cover no more than ¾ of each sample container.
- **68.64(3)** The milk hauler shall promptly deliver the samples to the place designated by the milk purchaser.

21—68.65(192) Milk sample carrying case. The carrying case shall be constructed to have all of the following characteristics:

- 1. Shall be constructed of rigid metal or plastic.
- 2. Shall be effectively insulated and refrigerated to keep the samples at the required temperature.
- 3. Shall have a rack or floater designed to hold samples in the upright position.

21—68.66(192) Bulk milk delivery.

68.66(1) If milk is unloaded or transferred at any location other than a licensed facility, the person having custody of the milk shall notify the department of that unloading or transfer before that milk is processed or shipped to any other location.

68.66(2) Air entering a bulk milk tanker when the tanker is unloading shall be filtered to prevent contamination of the milk.

21—68.67(192) False samples or records. The department may take enforcement action against a person doing or conspiring to do any of the following:

- 1. Falsely identify any milk sample.
- 2. Submit a false or manipulated milk sample.
- 3. Submit a milk sample collected in violation of this chapter.
- 4. Misrepresent the amount of milk collected from a dairy farm.
- 5. Misrepresent or falsify any record or report required under this chapter.

21—68.68(192) Violations prompting immediate suspension. A person violating any of the following shall have the person's milk hauler license suspended for the first full five weekdays following the violation. Administering the violation in this manner will allow a licensed field person to ride with a suspended milk hauler and to perform all of the bulk milk pickup procedures which the suspended milk hauler shall not perform while the license is suspended. This rule will also allow a dairy co-op or a proprietary establishment the ability to recover the cost of the field person employed by the business establishment while the employee is working with the suspended milk hauler.

- 1. 68.43(1) and 68.43(2). Cleaned bulk milk tanker and accessories.
- 2. 68.44(192). Sanitized bulk milk tanker and accessories.
- 3. 68.50(192). Bulk milk hauling supplies.
- 4. 68.56(1) and 68.56(4) to 68.56(7). Measuring the milk in the bulk tank.
- 5. 68.57(1). Collecting a milk sample from a bulk tank.
- 6. 68.58(1) to 68.58(4). Milk collection record.
- 7. 68.59(2) and 68.59(3). Loading bulk tank milk.
- 8. 68.60(1) and 68.60(2). Milk samples required for testing.
- 9. 68.61"1" to "9." Bulk milk sampling procedures.
- 10. 68.63"1" to "3." Producer sample identification.
- 11. 68.64(1) and 68.64(2). Care of samples.
- 12. 68.67"1" to "5." False samples or records.

21—68.69(192) Milk grader license required.

68.69(1) A person shall not be employed as a dairy field person or a milk intake person and shall not collect a raw milk sample from a farm bulk tank or collect a load sample from a bulk milk tanker in Iowa without first being evaluated by a department dairy inspector and making application for a milk grader license. A milk grader license will not be needed by a temporary milk plant intake person that is under the direct supervision of a licensed milk grader.

- **68.69(2)** The department may take an enforcement action against a person engaged in activities of a dairy field person or milk intake person or a person collecting milk samples from a farm bulk tank or from a bulk milk tanker if the department determines that the applicant has engaged in such activities without first obtaining a valid Iowa milk grader license or a valid 45-day interim license or has procured another person to operate without a license.
 - **68.69(3)** The cost of a milk grader license is \$10.
- **68.69(4)** A milk grader license obtained pursuant to this rule expires June 30 annually and is not transferable between persons.
 - **68.69(5)** As a condition of relicensing:
- a. A milk grader license renewal applicant for collecting a milk sample from a farm bulk tank shall have had an on-the-farm evaluation of milk collecting and care of milk sample procedures by a department inspector within two years immediately prior to relicensure and shall have attended a milk hauler school within three years immediately prior to relicensure, if a hauler school was made available within that three-year period.
- b. A milk grader license renewal applicant for collecting a milk sample from a bulk milk tanker at a milk plant shall have had an in-the-plant evaluation of milk collecting procedures by a department inspector within the last two years prior to relicensure.
- c. If the milk grader has had an evaluation within the last two years and, if required, has attended a milk hauler training school within the last three years, a milk grader renewal application and a return envelope will be mailed annually in April to the milk grader by the dairy products control bureau office in Des Moines.

21—68.70(192) New milk grader license applicant.

68.70(1) The department may issue a 45-day interim license to a new applicant for a milk grader license if the department determines that the new applicant has been trained by a licensed milk grader.

68.70(2) An applicant for a milk grader license to collect a milk sample from a farm bulk tank shall follow the procedures outlined in subrules 68.49(2) to 68.49(4).

68.70(3) An applicant for a milk grader license to collect a milk sample from a bulk milk tanker at a milk plant shall contact the dairy products control bureau office in Des Moines, telephone (515)281-3545, and request a sampling procedure review by a department inspector and a milk grader application.

The inspector will fill out "Inspection Form Short Form 009-0293/TS" for verification of the sampling procedure review and give a signed copy to the applicant. The applicant shall mail the signed copy, the completed application and the \$10 license fee to the dairy products control bureau office for a "Restricted Milk Grader License."

21—68.71(192,194) Can milk truck body.

68.71(1) A can milk truck body used for the purpose of picking up milk in milk cans from dairy farms for delivery to a milk plant shall not operate in the state of Iowa without first being issued a valid license from the department. This rule is intended to include can milk truck bodies that are commercially licensed in Iowa.

68.71(2) The can milk truck body vehicle license applicant shall include a description of the body, the make, model, year and color of the truck, a description of the can milk truck body, including the make, serial number, can capacity and the address at which the can milk truck body is customarily kept when not being used. The applicant shall also furnish any other information which the department reasonably requires for identification and licensing.

68.71(3) A license pursuant to this rule expires June 30 annually and is not transferable between truck bodies.

68.71(4) The department may take enforcement action against a person operating a can milk truck body if the department determines that the person has operated without a license or a person has procured another person to operate without a license.

68.71(5) The cost of the can milk truck body license is \$25 per year.

68.71(6) The applicant shall have received an annual inspection by a department inspector and shall make the vehicle available for inspection prior to receiving the license.

These rules are intended to implement Iowa Code chapter 192.

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